STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _10/593,119_

Source: _IFWP_

Date Processed by STIC: _9/28/06_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (**<http://www.uspto.gov/ebc/efs/downloads/documents.htm>** , **EFS Submission User Manual** - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05): U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED   SUGGESTED CORRECTION   SERIAL NUMBER: _10/593,119_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1____Wrapped Nucleics   The number/text at the end of each line "wrapped" down to the next line. This may occur if your file
     Wrapped Aminos   was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will
     prevent "wrapping."

2____Invalid Line Length   The rules require that a line not exceed 72 characters in length. This includes white spaces.

3____Misaligned Amino   The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers;
     Numbering   use space characters, instead.

4____Non-ASCII   The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please
     ensure your subsequent submission is saved in ASCII text.

5____Variable Length   Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules,
     each n or Xaa can only represent a single residue. Please present the maximum number of each
     residue having variable length and indicate in the <220>-<223> section that some may be missing.

6____PatentIn 2.0   A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid
     "bug"   sequences(s) _____. Normally, PatentIn would automatically generate this section from the
     previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to
     the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for**
     Artificial or Unknown sequences.

7____Skipped Sequences   Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
     (OLD RULES)   (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
     (i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
     (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
     This sequence is intentionally skipped
     Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8____Skipped Sequences   Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
     (NEW RULES)   <210> sequence id number
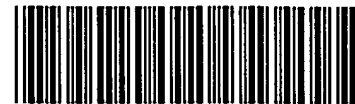   <400> sequence id number
     000

9____Use of n's or Xaa's   Use of n's and/or Xaa's have been detected in the Sequence Listing.
     (NEW RULES)   Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
     In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10____Invalid <213>   Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or
     Response   scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or
     is Artificial Sequence. (see item 11 below)

11____Use of <220>   Sequence(s) ___ missing the <220> "Feature" and associated numeric identifiers and responses. Use
     of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown."
     Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as
     explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of
     Sequence Rules

12____PatentIn 2.0   Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file,
     "bug"   resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence
     listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13____Misuse of n/Xaa   "n" can only represent a single <u>nucleotide</u>; "Xaa" can only represent a single <u>amino acid</u>

IFWP

RAW SEQUENCE LISTING   DATE: 09/28/2006
PATENT APPLICATION: US/10/593,119   TIME: 10:37:04

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09282006\J593119.raw

```
     4 <110> APPLICANT: Degussa AG
     6 <120> TITLE OF INVENTION: Novel alcohol dehydrogenases
     8 <130> FILE REFERENCE: S-IPM-PAT/Dr. Re-ko - K1419 EP
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/593,119
C--> 10 <141> CURRENT FILING DATE: 2006-09-18
    10 <160> NUMBER OF SEQ ID NOS: 68
    12 <170> SOFTWARE: PatentIn version 3.1
```

see item 4 on Err Summary Sheet

Does Not Comply Corrected Diskette Needed

ERRORED SEQUENCES

```
  2654 <210> SEQ ID NO: 68
  2656 <211> LENGTH: 1047
  2658 <212> TYPE: DNA
  2660 <213> ORGANISM: unknown
  2662 <220> FEATURE:
  2664 <221> NAME/KEY: source
  2665 <223> OTHER INFORMATION: ZF0050310= Arthrobacter paraffineus
  2667 <400> SEQUENCE: 68
  2668 atgaaggcaa tccagtacac gagaatcggc gcagaacccg aactcacgga gattcccaaa       60
  2670 cccgagcccg gtccaggtga agtgctcctg gaagtcaccg ctgccggcgt ctgccactcg      120
  2672 gacgacttca tcatgagcct gcccgaagag cagtacacct acggccttcc tctcacgctc      180
  2674 ggccacgaag gcgccggccg ggtcgccgcc gtcggcgagg gcgtcgaagg actcgacatc      240
  2676 ggaaccaatg tcgtcgtcta cggaccctgg ggctgtggca gctgttggca ctgctcgcaa      300
  2678 ggactcgaaa actactgttc tcgggcaaaa gaactcggca tcaatcctcc tggtctcggt      360
  2680 gcacccggcg cgttggccga attcatgatc gtcgattcac ctcgccacct cgtcccgatc      420
  2682 ggcgacctcg atccggtcaa gacggtgcca ctgaccgacg ccggtctgac tccgtatcac      480
  2684 gcgatcaagc gttcactgcc gaaacttcgc ggtggcgcgt acgccgtcgt catcggtacc      540
  2685 ggcggtctcg gccatgtcgc catccaactc ctccgccacc tctcggcagc aaccgtcatc      600
  2687 gcactcgacg tgagcgcgga caagctcgaa ctggcaacca aggtaggcgc tcacgaagtg      660
  2689 gtcctgtccg acaaggacgc ggccgagaac gtccgcagga tcaccggaag tcagggcgcc      720
  2691 gcactggttc tcgacttcgt cggctatcag cccaccatcg acaccgcgat ggctgtcgcc      780
  2693 ggcgtcggat cggacgtcac gatcgtcggg atcggcgacg gcaggcccca tgccaaagtc      840
  2695 gggttcttcc aaagtcctta cgaggcttct gtgacagttc cgtactgggg tgcccgcaac      900
  2697 gagctgatcg aattgatcga cctggcgcac gccggcatct tcgacatcgc ggtggagacc      960
  2699 ttcagtctcg acaacggcgc cgaagcgtat cgacgactgg ccgccggaac gctcagcggc     1020
E--> 2701 cgcgcggttg tggtccctgg tctgtag                                            
```

1047← insert

see pp 2, 5

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 09/28/2006
PATENT APPLICATION: US/10/593,119   TIME: 10:37:05

Input Set : **A:\PTO.RJ.txt**
Output Set: **N:\CRF4\09282006\J593119.raw**

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

```
Seq#:1;  Line(s) 26,27,33
Seq#:2;  Line(s) 97,98,104
Seq#:6;  Line(s) 323
Seq#:7;  Line(s) 374
Seq#:8;  Line(s) 425
Seq#:9;  Line(s) 476
Seq#:10; Line(s) 527
Seq#:11; Line(s) 578
Seq#:14; Line(s) 707
Seq#:15; Line(s) 760
Seq#:16; Line(s) 817
Seq#:17; Line(s) 881
Seq#:35; Line(s) 1670,1671,1677
Seq#:36; Line(s) 1714,1715,1721
Seq#:40; Line(s) 1857
Seq#:41; Line(s) 1894
Seq#:42; Line(s) 1929
Seq#:43; Line(s) 1966
Seq#:44; Line(s) 2002
Seq#:45; Line(s) 2039
Seq#:50; Line(s) 2197
Seq#:51; Line(s) 2238
```

VERIFICATION SUMMARY   DATE: 09/28/2006
PATENT APPLICATION: **US/10/593,119**   TIME: 10:37:05

Input Set : **A:\PTO.RJ.txt**
Output Set: **N:\CRF4\09282006\J593119.raw**

```
L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:29 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:30 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:31 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:32 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:33 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:34 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:35 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:36 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:100 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:101 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:102 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:103 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:104 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:105 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:106 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:107 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:277 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:278 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:279 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:280 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:281 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:282 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:283 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:321 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:322 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:323 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:324 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:325 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:326 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:327 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:328 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:329 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:372 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:373 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:374 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:375 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:376 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:377 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:378 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:379 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:380 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:423 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:424 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:425 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:426 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:427 M:259 W: Allowed number of lines exceeded, <223> Other Information:
```

VERIFICATION SUMMARY DATE: 09/28/2006
PATENT APPLICATION: **US/10/593,119** TIME: 10:37:05

Input Set : **A:\PTO.RJ.txt**
Output Set: **N:\CRF4\09282006\J593119.raw**

```
L:428 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:429 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:430 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:431 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:1562 M:283 W: Missing Blank Line separator, <220> field identifier
L:1725 M:283 W: Missing Blank Line separator, <400> field identifier
L:2701 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1047 SEQ:68
```

```
<210>    1
<211>    162
<212>    PRT
<213>    unknown
<220>
<221>    source
<223>    ZF0002326= Actinoplanes missouriensis; ZF0003505= Streptomyces;
ZF0050197= Pseudomonas oleovorans; ZF0050294= Rhodococcus; ZF0050330= Bacillus;
ZF0051303= Bacterium; ZF0051337= Methylomonas; ZF0051321= Bacterium; ZF0050782=
Lactobacillus bulgaricus; ZF0050544= Phyllobacterium rubiacearum; ZF0002852=
Rhodococcus; ZF0050310= Arthrobacter paraffineus; ZF0002862= Streptomyces
clavuligerus; ZF0050292= Bacterium; ZF0002031= Streptomyces; ZF0002349=
Streptomyces spectabilis; ZF0002434= Streptomyces; ZF0002437= Streptomyces;
ZF0003712= Micromonospora; ZF0003765= Streptomyces; ZF0051305= Bacterium;
ZF0003513= Actinomyces; ZF0050993= Kocuria; ZF0002018= Streptomyces; ZF0003767=
Actinomyces; ZF0002332= Streptomyces diastatochromogenes; ZF0003768=
Actinomyces; ZF0002379= Streptomyces coelescens; ZF0002351= Nonomuraea
roseoviolacea; ZF0003769= Actinomyces;

<400>    1
```

Per 1.823 of Sequence Rules, <223> response has a MAXIMUM of 4 lines. Please insert a <220> above every 5th line, and a <223> at beginning of every 5th line

<220> <223>

<220> <223>

The above is a sample of global errors.